BBA

General Subjects

Vol. 1157, 1993

# Cumulative Contents

*Information for Contributors* vii

## *Regular Papers*

Stimulation of microsomal chemiluminescence by ferritin
*S. Puntarulo and A.I. Cederbaum (Argentina, USA)* 1

Nitrogen metabolism during liver regeneration
*M. Lorenzi, A. De Martino, F. Carlucci, A. Tabucchi, B. Porcelli, M. Pizzichini, E. Marinello and R. Pagani (Italy)* 9

Isolation of an endogenous Na-pump specific inhibitor from normal pig urine: characterization and comparison with the inhibitor purified from bovine adrenal glands
*M. Tamura, M. Naruse, M. Sakakibara, T.I.W.T. Fitzgerald, P.J. Horton, J. Nelson and E. Price, Jr. (USA, Japan)* 15

Radical production from peroxide and peracid tumour promoters: EPR spin trapping studies
*T.L. Greenley and M.J. Davies (UK)* 23

Dielectric measurements on electro-manipulation media
*W.M. Arnold, A.G. Gessner and U. Zimmermann (Germany)* 32

A novel lectin in rabbit serum binds H type 1, H type 2 and *N*-acetyl lactosamine structures
*O. Hosomi, A. Takeya and S. Yazawa (Japan)* 45

The effect of sequence variations and structure on the cytolytic activity of melittin peptides
*J.A. Werkmeister, A. Kirkpatrick, J.A. McKenzie and D.E. Rivett (Australia)* 50

Phosphate-dependent glutaminase of rat skeletal muscle. Some properties and possible role in glutamine metabolism
*J. Świerczyński, Z. Bereznowski and W. Makarewicz (Poland)* 55

The myosin molecule – charge response to nucleotide binding
*E.M. Bartels, P.H. Cooke, G.F. Elliott and R.A. Hughes (UK)* 63

Structure-function relations of biotin derivatives of apamin
*S. Shahidi, P. Poronnik, J.A. Barden and D.I. Cook (Australia)* 74

Isolation, partial characterization and complete amino acid sequence of the toxic phospholipase A2 from the venom of the common viper, *Vipera berus berus*
*I. Križaj, J. Siigur, M. Samel, V. Cotič and F. Gubenšek (Slovenia, Estonia)* 81

A potassium channel toxin from the secretion of the sea anemone *Bunodosoma granulifera*. Isolation, amino acid sequence and biological activity
*A. Aneiros, I. García, J.R. Martínez, A.L. Harvey, A.J. Anderson, D.L. Marshall, Å. Engström, U. Hellman and E. Karlsson (Cuba, UK, Sweden)* 86

A microtiter enzyme-linked immunosorbent assay for protein tyrosine phosphatase
*S. Mishra and A.W. Hamburger (USA)* 93

Formation of hydroxyl radicals and $Co^{3+}$ in the reaction of $Co^{2+}$-EDTA with hydrogen peroxide. Catalytic effect of $Fe^{3+}$
*M.K. Eberhardt, C. Santos and M.A. Soto (Puerto Rico)* 102

*Trichoderma reesei* has no true exo-cellulase: all intact and truncated cellulases produce new reducing end groups on cellulose
*J. Ståhlberg, G. Johansson and G. Pettersson (Sweden)* 107

Reduced $T_3$ deiodination by the human hepatoblastoma cell line HepG2 caused by deficient $T_3$ sulfation
*P.G.J. Van Stralen, H.J. Van der Hoek, R. Docter, M. De Jong, E.P. Krenning, C.F. Lim and G. Hennemann (The Netherlands)* 114

## *Regular Papers*

Role of Hageman factor/kallikrein-kinin system in pseudomonal elastase-induced shock model
*M.M.H. Khan, T. Yamamoto, H. Araki, Y. Shibuya and T. Kambara (Japan)* 119

Three-dimensional electric field traps for manipulation of cells – calculation and experimental verification
*T. Schnelle, R. Hagedorn, G. Fuhr, S. Fiedler and T. Müller (Germany)* 127

A new mixed disulfide species in human cataractous and aged lenses
*J.E. Dickerson, Jr. and M.F. Lou (USA)* 141
Cleavage of the $\alpha_1$-microglobulin-bikunin precursor is localized to the Golgi apparatus of rat liver cells
*T. Bratt, H. Olsson, E.M. Sjöberg, B. Jergil and B. Åkerström (Sweden)* 147
Hydrogen peroxide metabolism and oxidative stress in cortical, medullary and papillary zones of rat kidney
*B. Gonzalez-Flecha, P. Evelson, N. Sterin-Speziale and A. Boveris (Argentina)* 155
Hydroxyl radical production in the reactions of copper-containing amine oxidases with substrates
*F.N. Castellano, Z. He and F.T. Greenaway (USA)* 162
Identification and characterization of two enzymes involved in the intracellular metabolism of cobalamin. Cyanocobalamin $\beta$-ligand transferase and microsomal cob(III)alamin reductase
*E.H. Pezacka (USA)* 167
Purification and characterization of the valine sensitive acetolactate synthase from *Serratia marcescens* ATCC 25419
*J.H. Yang and S.S. Kim (South Korea)* 178
Polymorphic hemoglobin from a midge larva (*Tokunagayusurika akamusi*) can be divided into two different types
*M. Fukuda, T. Takagi and K. Shikama (Japan)* 185
Preparation and characterization of *S*-[2-carboxy-1-(1*H*-imidazol-4-yl)ethyl]glutathione and its derivatives as proposed precursors of *S*-[2-carboxy-1-(1*H*-imidazol-4-yl)ethyl]cysteine, a compound found in human urine
*M. Kinuta, T. Ubuka, K. Yao, S. Yamada, K. Yukihiro and M. Tomozawa (Japan)* 192
Acetylcholinesterase as polyelectrolyte: interaction with multivalent cationic inhibitors
*V. Tõugu, T. Kesvatera, A. Lääne and A. Aaviksaa (Estonia)* 199
Localisation of $\alpha$, $\mu$ and $\pi$ class glutathione *S*-transferases in kidney: comparison with CuZn superoxide dismutase
*S.J. Davies, R. D'Sousa, H. Philips, D. Mattey, C. Hiley, J.D. Hayes, G.M. Aber and R.C. Strange (UK)* 204
On the inactivation of bacteria by singlet oxygen – another view
*J.G. Parker (MD (USA))* 209
Solvent effect on testosterone-antitestosterone interaction
*G. Giraudi and C. Baggiani (Italy)* 211
Further characterization of an adenosine-containing modification of vaccinia virus proteins
*S.J. Child and D.E. Hruby (USA)* 217

## *Regular Papers*

The presence of lysylpyridinoline in the hypertrophic cartilage of newly hatched chicks
*M.W. Orth, D.A. Martinez, M.E. Cook and A.C. Vailas (USA)* 229
An investigation of the filtration capacity and the fate of large filtered sterically-stabilized microspheres in rat spleen
*S.M. Moghimi, H. Hedeman, I.S. Muir, L. Illum and S.S. Davis (UK)* 233
Structure and composition of type IV collagen of bovine aorta
*G.K. Reddy, S. Gunwar, R. Kalluri, B.G. Hudson and M.E. Noelken (USA)* 241
Oligosaccharide specificity of normal human hepatocyte $\alpha$1–3 fucosyltransferase
*M. Jezequel-Cuer, H. N'Guyen-Cong, D. Biou and G. Durand (France)* 252
Metabolic fate of alanine in an insect *Manduca sexta*: effects of starvation and parasitism
*S.N. Thompson and R.W.-K. Lee (USA)* 259
Hemozoin production by *Plasmodium falciparum*: variation with strain and exposure to chloroquine
*A.U. Orjih and C.D. Fitch (USA)* 270
Resonance Raman study of sirohydrochlorin and siroheme in sulfite reductases from sulfate reducing bacteria
*T. Underwood-Lemons, I. Moura and K.T. Yue (USA, Portugal)* 275
$\alpha$2,6-Sialyltransferase predominates in cultured jejunum of suckling rats: it is up-regulated by dexamethasone and secreted during cultivation
*A. Hamr, V. Vlasáková and J. Kolínská (Czech Republic)* 285
Branched-chain 2-oxo acid dehydrogenase complex activation by tetanic contractions in rat skeletal muscle
*Y. Shimomura, H. Fujii, M. Suzuki, N. Fujitsuka, M. Naoi, S. Sugiyama and R.A. Harris (Japan, USA)* 290
Egg hatching activity of trihydroxylated eicosanoids in the barnacle *Balanus balanoides*
*E.M. Hill, D.L. Holland and J. East (UK)* 297
The mechanism of interaction of carnosine with superoxide radicals in water solutions
*A.R. Pavlov, A.A. Revina, A.M. Dupin, A.A. Boldyrev and A.I. Yaropolov (Russia)* 304
Kinetic study of free-radical-scavenging action of biological hydroquinones (reduced forms of ubiquinone, vitamin K and tocopherol quinone) in solution

*K. Mukai, H. Morimoto, S. Kikuchi and S.-i. Nagaoka (Japan)* 313

Participation of oxidative stress in the process of osteoclast differentiation
*N. Suda, I. Morita, T. Kuroda and S.-i. Murota (Japan)* 318

## *Rapid Reports*

Characterization of topa quinone cofactor
*K. Kano, T. Mori, B. Uno, M. Goto and T. Ikeda (Japan)* 324

Microring-ring electrode for manipulation of a single cell
*T. Matsue, N. Matsumoto, S. Koike and I. Uchida (Japan)* 332

*Corrigendum* 337

*Cumulative Contents, Vol. 1157* 339

*Author Index* 342